Users' Guide to the Database Builder (DRAFT)

1 Introduction

1.1 Purposes of this Guide

This guide has been designed to provide data entry users with step by step information for entering, viewing and editing data, and creating and viewing reports in the Database Builder software. It also provides a glossary of terminology used in the Database Builder.

1.1.1 Documents and other Resources

Additional information and technical information can be found in:

- The Database Builder Planning Workbook—explains the planning steps required before setup is started
- The Database Builder Administrator's Guide—provides technical information for system administrators
- The Database Builder User's Guide—this manual
- The online Help system linked from within the Database Builder software
- The Database Builder Multimedia Training CD-ROM—provides training and tutorials for using the software (in development)

1.1.2 Intended Audience

This manual is intended as a step by step guide for data entry users of the system. Qualifications for data entry personnel include: a general understanding of web-based computing (how to use the keyboard and mouse, what is a hyperlink and how to click on links, using drop-down fields and buttons, etc.), a basic understanding of the DbB system and terminology (can be provided in a four hour training session); an understanding of the instruments to be used in the program (can be provided in training).

1.1.3 Conventions Used in this Document

In this document, screen shots from the software are included in each step in order to make it easier to understand the instructions provided. Note that at times these screen shots will vary slightly from the current version of the software. They are intended as illustrations only.

In places were data entry examples are provided, the type face used in the document is courier, e.g.: Type in your user id: joeuser. When a button is described, it is in quotes. e.g. Click the "Continue" button.

Notes of special interest and picture labels are italicized, e.g.: Note: make sure you...

1.2 Understanding the Terminology and Iconography

To use the Database Builder, it is essential to understand the terminology and iconography used in the system. There is a simple map to the common icons on the home page of the site:



Key terminology related to the data systems include:

ITEM: A single statement, query or stem choice that the respondent will answer in a defined way. For example, a statement item might be "I have made a final decision to stay away from marijuana." The participant must then pick one of the three possible responses: "True," "False," or "I Don't Know." A stem item example is "When I smoke a cigarette, I..." with choices "...wish I could quit.," and "...enjoy the experience."

MEASURE: An ordered group of items, or sometimes a single item (such as "age"). Some measures may have psychometric properties of interest to the outcome of the evaluation. Others will be used to collect other data, such as demographics, cohort or grouping data, and other values of interest to the evaluation. Many pre-defined measures used in prevention research have been included in the Database Builder.

INSTRUMENT: A group of measures, arranged in a definite order. The instrument would correspond to the questionnaire or survey packet that is administered to a group of respondents.

RESPONDENT/SUBJECT: Someone who provides responses (respondent) or about whom responses are provided (subject) to items in an instrument. Respondents and subjects may be participants in a program.

CASE: A complete set of data collected from or about an individual respondent or subject.

COHORT: A group of individuals who share some common characteristic or experience (e.g., a birth cohort, a classroom). Because individuals may be members of several cohorts, it is critical that the defining characteristic of the cohort be made explicit.

MEASUREMENT POINT/PERIOD: A point in time where a specific instrument is administered to one or more respondents/subjects in a specific cohort. The measurement point may be a specific date or time (point), or may be an open-ended range of dates (period).

RESPONSE: The response to a specific item that was posed to a specific respondent at a specific measurement point (or during a specific measurement period). Item responses are coded as variables in the software, and are used in data analysis.

MEASUREMENT SERIES: A group of two or more measurement points/periods occurring in a specific order. The measurement points reflect a common cohort, but need not use a common instrument. For example, a measurement series may be composed of three measurement points: a pre-test, a post-test, and a follow-up. Longitudinal studies (following the same group over time), repeated measures designs, cross-sectional and time series designs all make use measurement series data within the Database Builder tool for tracking.

USER: Any person that has an individual login (account) on the Database Builder system.

2 Security and Permissions

The Database Builder software uses a powerful and flexible security system designed to allow each user to work with the tools and data they need without interfering with other user's tools and data. Your security level will determine what data sets, instruments, measures, cohorts, and measurement points/series you have access to. Your system administrator will assign your security level. For more information see the Administrator Guide.

Each feature in the Database Builder has a permission setting. You may or may not be able to view certain features or pages depending on your permissions. For example, you will only see the "Measures & Instruments" page (and corresponding tab) if you have permission to view or edit Measures and Instruments.



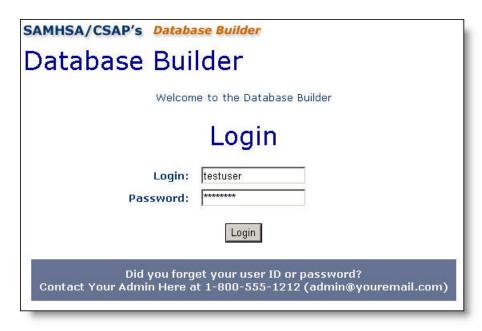
Each tool in the Database Builder also has permissions such as Read/View and Write/Edit. Your system administrator will give you the permissions you need to work with the appropriate tools and data. When you enter data, you are the "owner" of that data. You automatically have Full permissions, meaning you can Read/View, Write/Edit, and Delete the data. Other users of the system at your security level will have Read permission and may not modify your data unless the system administrator gives them specific permissions to do so.

3 Entering/Editing Data

3.1 Logging In

1. To Log in to the Database Builder data tool, click the mouse in the Login field and type in your User ID. Click in the Password field and type in your password. User IDs are not case sensitive, but passwords are. This means that when you type in your User ID it doesn't matter if you use upper case or lower case letters. For example typing, "JOEUSER" is the same as

"joeuser" and "JoEuSeR" for the User ID. However for the password, "password" is not the same as "PASSWORD". When you type in your password, it will not show as a set of letters on the screen but instead as a set of asterisks (*). This is a security measure, to prevent others from seeing your password. Note: If you do not have a User ID and password, contact your system administrator to obtain one.



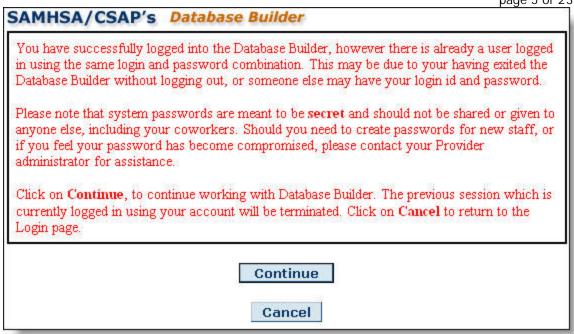
Login Screen

2. If your login is successful you will see the main menu for the Database Builder.



Main Menu Page

If a session already exists for the User ID you used it most likely means that someone is already logged in with the same User ID, in which case you will see the following message:



Duplicate User ID and Password Message

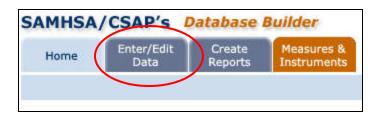
If your login attempt was unsuccessful you will see the following error message:

Your Login and Password do not match. Please check your login and password and try logging in again, or contact your state administrator before you attempt to use the system.

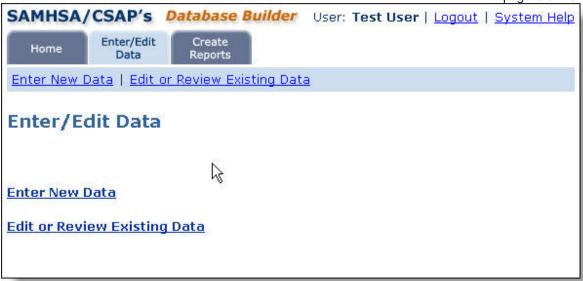
Make sure the "Caps Lock" button is off on your keyboard. Try entering your User ID and password again.

3.2 Entering Data

1. Click on the "Enter/Edit Data" tab.

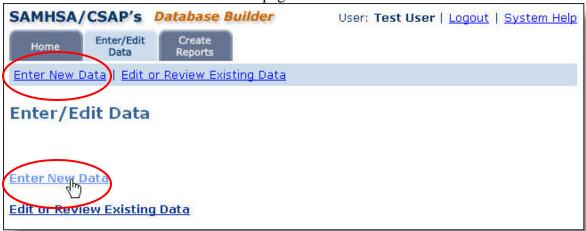


The Enter/Edit Data page is displayed.



Enter/Edit Data Main Page

2. Click "Enter New Data" either on the page or in the header section under the tab.

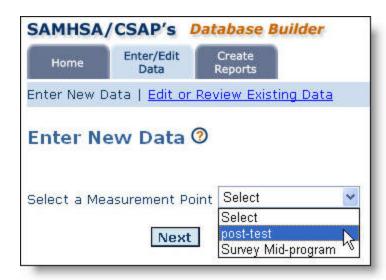


The Enter New Data screen will be displayed:

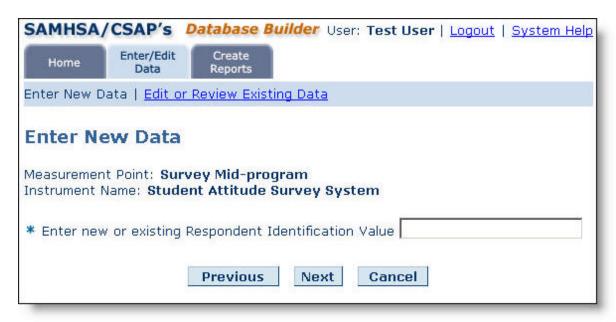


Enter New Data: Select Measurement Point Page

3. Before you can enter data you must select a Measurement Point for one of the instruments to which you have access.



4. Click the "Next" button. The next screen requests a new or existing Respondent Identification Value. If you are entering data collected for a respondent that is pre-defined in a cohort, enter the appropriate ID value. You may also assign a number here for a new respondent. If you are not sure of the Respondent ID Value, check with your system or program administrator. Note: if you enter an ID value that is not matched against an existing value, the system will create a new respondent with the ID value you entered. Be careful when typing in this number.



Enter New Data: Enter Respondent ID Page

5. Next verify the respondent information.



Enter New Data: Respondent Information Confirm Page

6. Now you are ready to enter the data collected for this respondent at this measurement point. The entire instrument will be displayed on a single page:

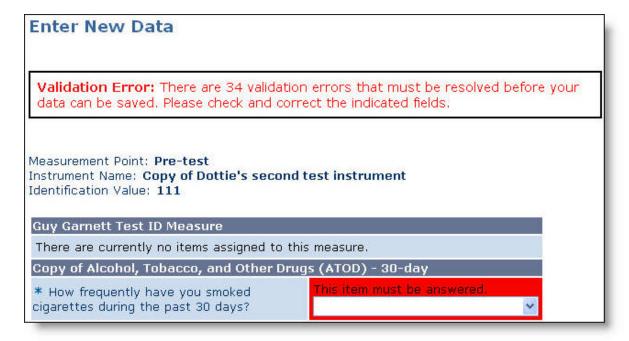
Tip: To complete data entry using your kevboard rather than the mouse, use the TAB key to move from field to field and the up and down arrow keys to select choices from the drop down lists.

Enter New Data	
Measurement Point: Survey Mid-progr Instrument Name: Student Attitude Su Identification Value: 111	
Guy Garnett Test ID Measure	
There are currently no items assigned	to this measure.
Individual /Peer - Rebelliousness Sc	cale
I do the opposite of what people tell me, just to get them mad.	
I ignore rules that get in my way.	
I like to see how much I can get away with.	_
Student Survey: Drug/Alcohol Usago	e

Enter New Data: Data Entry Page

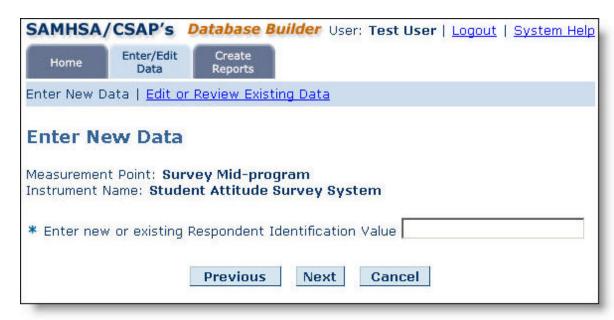
7. When you have finished entering all the data, click the "Save" button. Note: The record is NOT saved until you click the "Save" button! If you leave your computer and the session times out, the record is not saved. If your network connection is lost before you click the "Save" button, the record you are working on will not be saved.

8. Depending on the instrument, some responses may be required. Leaving a required field blank will give an error message and prevent the data from being saved.



Enter New Data: Validation Error Page

If you have filled in all the required fields and the record is saved successfully, you will be returned to the Enter Respondent ID page to enter the next respondent for the measurement point.



Enter New Data: Enter Respondent ID Page

9. Enter the next respondent ID or if you are finished entering data, click the "Cancel" button. If you want to go back and edit or review the data you entered you can do so from the "Edit or Review Existing Data" link in the section header.

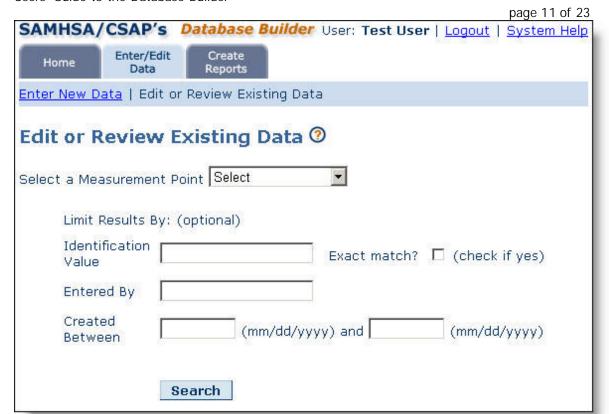
3.3 Editing Data

When you click on the "Edit or Review Existing Data" link from either the Enter/Edit Data page or the link in the section header,



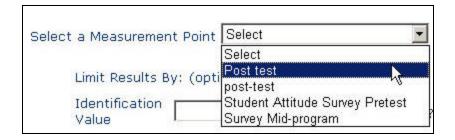
Enter/Edit Data Main Page

the Existing Data Search page will be displayed.



Existing Data Search Page

1. Select a Measurement Point from the drop down list.



If you do not enter any information in the "Limit Results By:" section below, all results for that measurement point will be displayed. You may optionally limit the search results by one or more of the following:

• **Respondent ID** – Enter the respondent Id value in the "Identification Value" field. This will return all records containing the number you entered.

Identification Exact ma	atch? \Box (che	ck if yes)
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For example, if you enter "11", records 11, 112 and 11234 would be returned if those were respondent id values for the measurement point. You may search for an exact match by checking the "Exact Match?" option. In the same example, if you enter "11", record 11 would be the only one returned.

• **User Name** – Enter the first and/or last name of the person who entered the data in the "Entered By" field. *Note: the search string is not case-sensitive*.

	10	
Entered By		
100		

For example, you could limit the search by entering the User ID "aharris" in the Entered By field. This would only return records that were entered by the user aharris.

• Creation Date – Enter a date range in the "Created Between" fields to limit the search by date.

Created [(mm/dd/yyyy) and	(mm/dd/www)
Between	(mm/dd/yyyy) and [(mm/dd/yyyy)

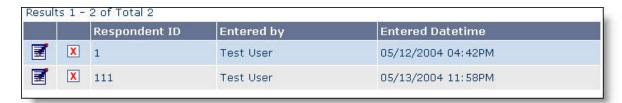
For example, you could limit the search to records created between "02/03/2004" and "02/23/2004". Note: entering the same date in both fields will not work. For example, entering "05/27/2004" in both fields will not return any results. Instead, if you want to limit the search to records created on 05/27/2004, enter "05/26/2004" and "05/28/2004".

Note: you are not required to enter information in all the fields, you may leave them all balnk or only fill in one or two fields. You could enter only the dates, or only the "Entered By" information.

- 2. Once you have entered your search criteria, click the "Search" button.
- 3. The search results page will be displayed. If no results were found you will see an error message:

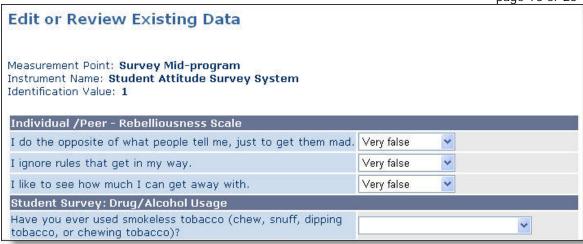
```
No respondent matched your criteria. Please try again.
```

If results were found they will be displayed below the search form:



4. Click on the edit icon next to a record to edit/review it. If the record is deletable, you may delete the record by clicking the delete icon. When you edit a record, you will see the entire instrument on a single page with the data filled in. At the top of the page you will see the Measurement Point, Instrument Name, and Respondent Identification Value.

page 13 of 23



Edit or Review Existing Data Page

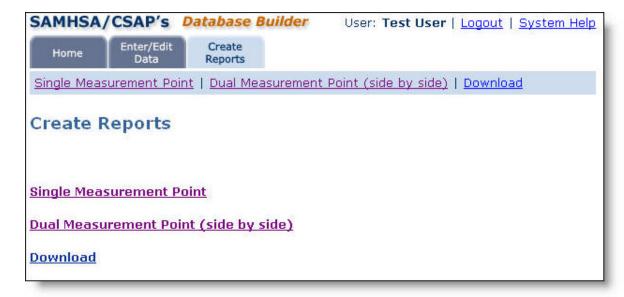
5. When you are finished reviewing or editing the record, click the "Save" button. *Note: just as when entering data, there may be required fields that must be filled out.*

4 Creating Reports

1. Clicking the "Create Reports" tab



will display the Create Reports page.



Create Reports Page

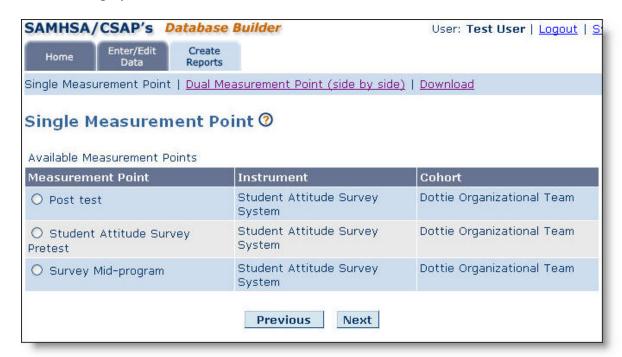
- 2. From the links on this page or the links in the section header, you may create a report by selecting from the following options:
 - Single Measurement Point
 - Dual Measurement Point (side by side)
 - Download

4.1 Single Measurement Point

1. Click the "Single Measurement Point" link.

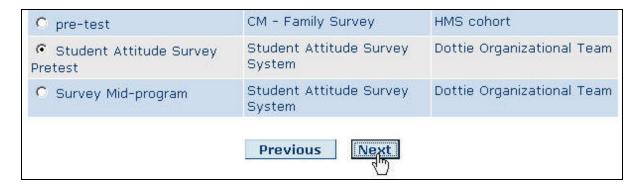


This will display the Available Measurement Points screen:

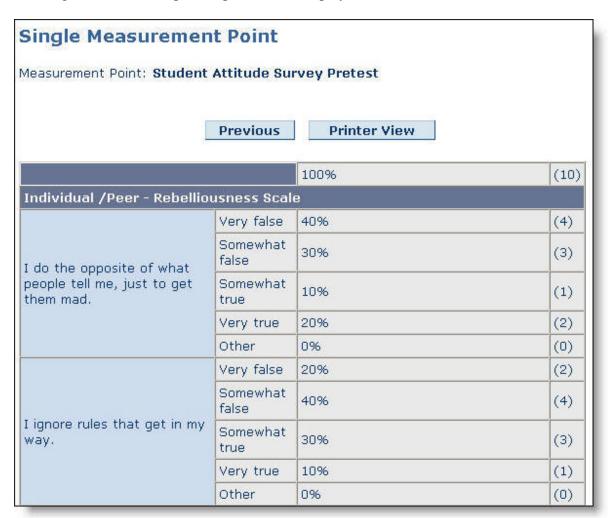


Available Measurement Points Page

2. Select the Measurement Point you would like to create the report for and select the "Next" button. The report will be displayed.



The single measurement point report will be displayed



Single Measurement Point Report

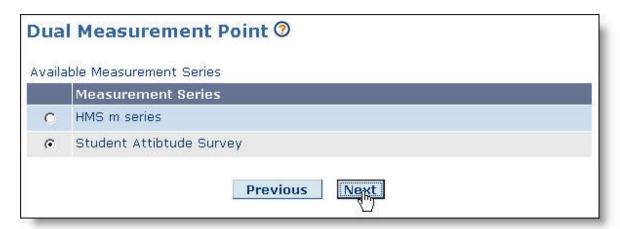
The report header row contains the percentage of respondents for whom data has been entered. The number in the right column represents the number of respondents for the measurement point.

For each item in each measure you will see the percentages for each possible answer and the number of respondents who selected that answer.

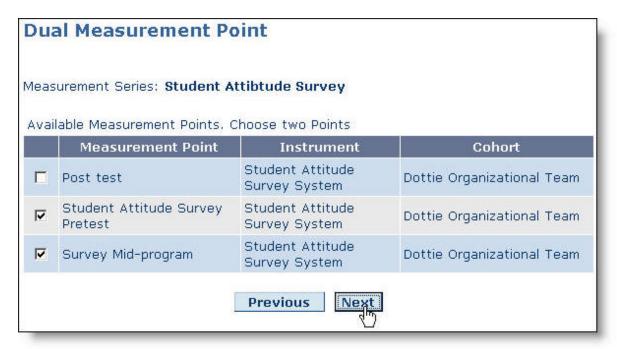
4.2 Dual Measurement Point (side by side)

To compare two measurement points side by side, for example a pre-test and post-test, click the "Dual Measurement Point" link.

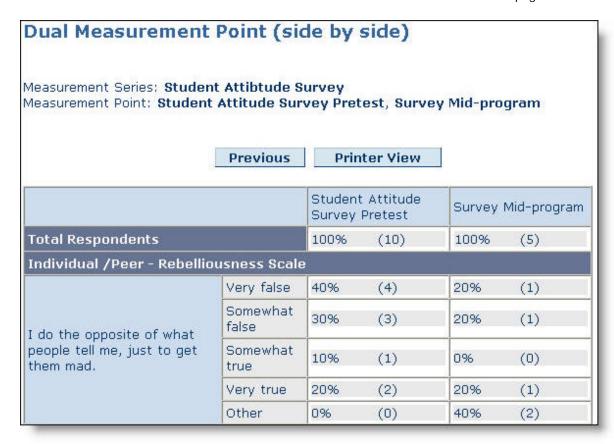
1. Select from one of the measurement series available and click the "Next" button.



2. Select two of the available measurement points in the series and click the "Next" button.



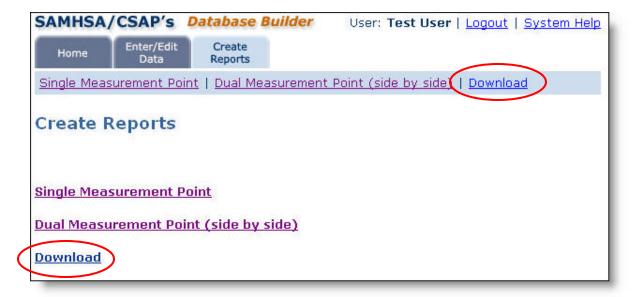
3. The report will be displayed. As with the single measurement point report, the percentages and respondent numbers will be displayed in the header of the report. There will be two columns on the right, one for each measurement point allowing you to compare them side by side.



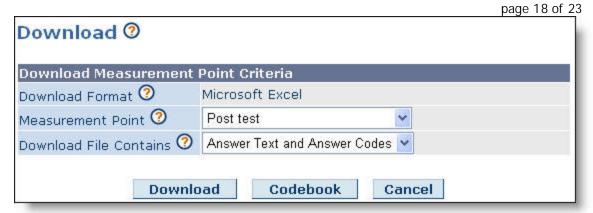
Dual Measurement Point Report

4.3 Download

Clicking the "Download" link,



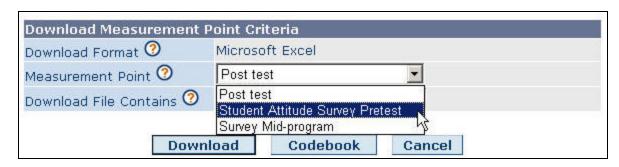
will display the Download screen:



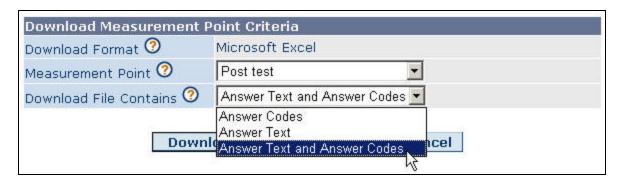
Download Page

This feature allows you to download report data into Excel format.

1. First select the measurement point for which you would like to download data. This list is created from the measurement points to which you have access.



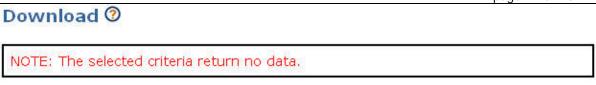
2. Next select whether the download file will contain Answer Codes, Answer Text, or both.



3. Click the "Download" button to begin the download.

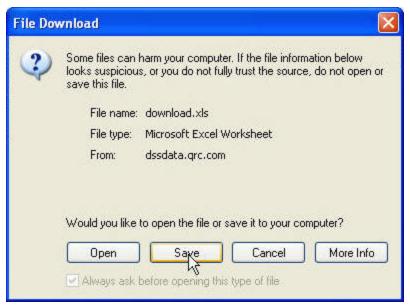


If there is no data to download, you will see the following error message:



Clicking the "Cancel" button returns you to the Create Reports page.

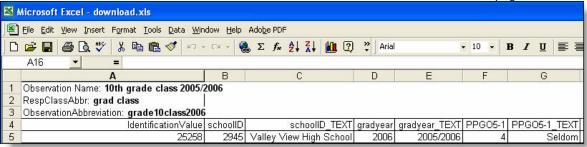
If there is data, a File Download dialog box will appear asking if you want to Open or Save the file. The dialog box you see may look similar to this example.



File Download Dialog Box

Download format consists of a file with an ".xls" extension. This file is a Microsoft Excel file and can be saved to your system by clicking the "Save" button. If your browser has an Excel plugin, you can select "Open" to open the file in your browser and then save the file to the desired location on your computer. *Note: Microsoft Excel has a limit of 255 columns. Long questionnaires, generally those with over 125 questions, will exceed this limit if both answer codes and long text answers are included in the download. To allow you to download all questions in the case of long questionnaires, a drop down list is provided to specify whether the download file should contain "Answer Codes" only, "Answer Text" only, or both "Answer Codes and Answer Text".*

When you open the file that you have created, the rows will contain records, and the columns the variables and values of the variables. Exactly what the file contains will depend on whether you specified "Answer Text and Answer Code" or "Answer code only". In the example below, a student with the ID number 25258 was entered into the instrument. The observation downloaded was named "10th grade class 2005/2006". The column headings show the variable names, with "_TEXT" appended to the end of the variable name to show the value of the variable in text. So, schoolID 2945 corresponds to schoolID_TEXT "Valley View High School". The questions in the instrument continue in the columns to the right, and the numeric and text responses are displayed.



Once the data has been downloaded into Excel, you can use the software to sort data by column, review the entries, and create charts and graphs. For example, the same data shown in the previous example can be sorted by school ID to see the data entered for each respondent:

M M	Microsoft Excel - download.xls									
	File Edit View Insert Format Tools Data Window Help Adobe PDF									
	F23 =	· · · · · · · · · · · · · · · · · · ·		100			8			
	А	В	С	D	E	F	G			
1	Observation Name: 10th grade class 2005/2	2006								
2	RespClassAbbr: grad class									
3	ObservationAbbreviation: grade10class2006	i								
4	Identification∀alue	schoolID	gradyear	PPG05-1	PPG05-2	PPG05-3	PPG05-4			
5	25258	2945	2006	4	5	5	3			
6	112547	2945	2006	3	2	2	1			
7	74587	2945	2006	2	2	1	2			
8	36898	2945	2006	2	3	2	2			
9	58854	2945	2006	2	2	2	2			
10	48965	2945	2006	3	4	4	3			
11	81551	2945	2006	4	5	2	2			
12	98758	2945	2006	~	1	1	1			
13	45875	2950	2006	2	3	2	4			
14	89758	2950	2006	1	2	4	3			
15	33254	2950	2006	1	3	3	2			
16	87578	2950	2006	. 2	5	4	3			
17	100254	2950	2006	3	3	2	3			

The columns can be sorted and selected to see results graphed, as displayed below. It is beyond the scope of this manual to explain the use of Excel, but training classes, books, videos and websites can provide additional assistance in learning how to use the sorting, filtering, counting and charting capacities of this tool.

							page	e 21 of 23	
IdentificationValue	schoolID	gradyear	PPG05-2	PPG05-2	TEXT	PPG05-3	PPG05-4	PPG05-5	
98758	2945	2006	1	Strongly	agree	1	1	2	
89758	2950	2006	1	Strongly	agree	4	3	2	
33254	2950	2006	1	Strongly	agree	3	2	2	
7458									
3689									
5885									
4587									
8757	8757								
11254	☐ Strongly agree							y agree	
4896:	Agree								
10025							□Disagre	.	
2525							1 -		
8155							☐ Strongly	y disagree	

The Codebook option will create the code book to correspond to the download file based on the criteria selected.



4. If you wish to print out the codebook, click the "Codebook" button. When presented with the File Download dialog box:



File Download Dialog Box

You may again choose to save the file to your computer via the "Save" button or open the file in your browser if you have a Microsoft Word plugin. The code book file is a Microsoft Word file and has a ".doc" extension. *Note: Be sure to save the file to a name of your choice before closing the code book file*.

The codebook contains the definitions of the variables in your dataset, and the corresponding answer key values. For example, for the data set graphed above the codebook entry for *schoolID* contains the following information:

```
Measure Name: School cohort ID measure
2
               Item Name: School
          Excel Column: B & C
                Item Text: Select the school which you attend
Item Variable Name: schoolID
              Help Text: Select the school which you plan to graduate from,
even if you have been temporarily suspended from that school are attending an
alternative school.
               Data Type: Multiple-Choice
Required: Yes
                       Code
                                  Value
                         2945
                                        Valley View High School
                         2950
                                       Deer Creek High School
                                       Middle River High School
                         2955
                                       Little Town High School
                         2960
```

4.4 Logging Out

Your session will end either when you log out of the system using the "Logout" link



...or after a certain amount of time has passed in which the system is idle (the settings for time out depend on how your system has been configured). For example if you leave your computer for more than 15 minutes, the system will automatically end your session.

Appendix A: Glossary

CASE: A complete set of data collected from or about an individual respondent or subject.

COHORT: A group of individuals who share some common characteristic or experience (e.g., a birth cohort, a classroom). Because individuals may be members of several cohorts, it is critical that the defining characteristic of the cohort be made explicit.

DATABASE: A collection of data arranged for ease and speed of search and retrieval

INSTRUMENT: A group of measures, arranged in a definite order. The instrument would correspond to the questionnaire or survey packet that is administered to a group of respondents.

ITEM: A single statement, query or stem choice that the respondent will answer in a defined way. For example, a statement item might be "I have made a final decision to stay away from marijuana." The participant must then pick one of the three possible responses: "True," "False," or "I Don't Know." A stem item example is "When I smoke a cigarette, I..." with choices "...wish I could quit.," and "...enjoy the experience."

MEASURE: An ordered group of items, or sometimes a single item (such as "age"). Some measures may have psychometric properties of interest to the outcome of the evaluation. Others will be used to collect other data, such as demographics, cohort or grouping data, and other values of interest to the evaluation. Many pre-defined measures used in prevention research have been included in the Database Builder.

RESPONDENT/SUBJECT: Someone who provides responses (respondent) or about whom responses are provided (subject) to items in an instrument.

RESPONSE: The response to a specific item that was posed to a specific respondent at a specific measurement point (or during a specific measurement period). Item responses are coded as variables in the software, and are used in data analysis.

MEASUREMENT POINT/PERIOD: A point in time where a specific instrument is administered to one or more respondents/subjects in a specific cohort. The measurement point may be a specific date or time (point), or may be an open-ended range of dates (period).

MEASUREMENT SERIES: A group of two or more measurement points/periods occurring in a specific order. The measurement points reflect a common cohort, but need not use a common instrument. For example, a measurement series may be composed of three measurement points: a pre-test, a post-test, and a follow-up. Longitudinal studies (following the same group over time), repeated measures designs, cross-sectional and time series designs all make use measurement series data within the Database Builder tool for tracking.

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